

2008/2009 Bridge Construction Project Summary

The following summarizes construction activities on City (DOTE) and County bridges that occurred in 2008 or will occur in 2009. Except as noted, Department of Transportation and Engineering (DOTE) staff performed plan development and construction management for these bridge projects.

2008/2009 City (DOTE) Bridge Construction Projects

Lincoln Avenue Bridge Deck Overlay (City Bridge in Walnut Hills)

This project consisted of concrete overlaying the existing bridge deck, reconstructing portions of the backwalls, making expansion joint repairs, and painting steel members. The accepted contract bid price for this work was \$819,029 and was financed with City operating and City CIP bridge funds. Work began in September of 2007 and was completed in the Spring of 2008.

Rosa Parks (Vine Street) Grating Repairs (City Bridge in Central Riverfront District)

This project consisted of replacing the steel ventilation grating and making concrete repairs on the wearing surface of the Rosa Parks (Vine Street) Bridge over Parking Garage. This work was partially financed with money retained from the original contract due to lack of satisfaction with the original work. The remainder of the contract was financed with CIP bridge funds. The accepted contract bid price was \$58,275. The work was completed before Opening Day, 2008.

Second Street over Transit Center – Leak Investigation (City Bridge in Central Riverfront District)

This project consists of investigating the source of leaks into the Transit Center and making recommendations on how to mitigate leakage. The investigation is being performed by a directed consultant. The fee for this work was \$100,000 and was financed with funds from parking operations at the Riverfront Transit Center.

Second Street over Transit Center – Railing Repair (City Bridge in Central Riverfront District)

This project consisted of repairing crash damage to the railing on the south side of the bridge. The vehicle owner's insurance company reimbursed the City for the \$21,767 in contract costs, plus City engineering and administrative costs, for these repairs. Work was completed by Opening Day, 2008.

Central Incinerator Approach Bridge over the Mill Creek – Fracture Critical Inspection and Gusset Plate Load Rating (City Bridge in Camp Washington)

This bridge is the only fracture critical truss bridge in the City (DOTE) bridge inventory. This project consisted of making a detailed, hands-on inspection of all fracture critical bridge members and load rating at the gusset plate connections as recommended by the FHWA in response to the Minnesota I-35 bridge collapse. The inspection and analysis was completed in the Spring of 2008. The cost for this contract was \$50,000 and was financed with City CIP bridge funds.

Second Street over Transit Center, East End – Load Testing and Crack Monitoring (City Bridge in Central Riverfront District)

This bridge was constructed as part of the FWW project and experienced cracking immediately upon its completion. The extent of cracking was documented in 2004 by a directed consultant and a load test was performed by UC in 2005. During that load test, the bridge deflected as expected indicating that the structure was performing as designed. A follow-up inspection/documentation of observable cracking by a directed consultant and a follow-up load test by UC was performed in October of 2008 to verify that the bridge is continuing to perform as designed. The cost for these contracts is approximately \$100,000 and is being financed with City CIP bridge funds. Additional crack monitoring will be performed in 2009.

Burns Street Ramp Bridge Replacement (City Bridge in Lower Price Hill)

See Major Bridge Projects for information on this project.

Baymiller Street Pedestrian Bridge – Concrete Repairs (City Bridge in Over-The-Rhine)

This project originally consisted of making repairs to the concrete structure, handrails and vandal protective fencing, replacing the expansion joints and recoating the existing structure. After work began, it was determined that the condition of the existing concrete was too deteriorated to repair and the portion of the structure over the roadway was removed. DOTE is in the process of soliciting formal community input regarding the community's desire to reconstruct a new pedestrian bridge at this location. The project was financed using City operating and City CIP bridge funds.

Central Parkway over Rapid Transit Tubes, Walnut to Draper – Concrete Repairs (City Bridge in the CBD, Over the Rhine, the West End, CUF and Camp Washington)

A light rail feasibility study of the tubes was completed by a consultant selected by the City in 2007. The consultant determined that the tubes could carry future light rail and recommended that concrete repairs be made to several of the expansion joints to maintain the structure's viability for future use. This recommendation was supported by Council. The estimated cost of these concrete repairs is \$3 million. Water Works has been directed to provide \$2.5 million to the project. DOTE is preparing plans for making the recommended concrete repairs. Pending the availability of funds, construction is scheduled to start in late 2009 when the water main located inside the Rapid Transit Tubes can be shut down. Other recommended repairs such as replacing the ventilation shaft gratings in the median of Central Parkway were completed in 2007 as part of the Central Parkway Enhancement Project.

2008/2009 County Bridge Construction Projects

Eighth Street Viaduct Reconstruction and Eighth Street Bridge Replacement (County Bridges in Queensgate and Lower Price Hill)

See Major Bridge Projects for information on this project.

Western Hills Viaduct Fracture Critical Inspection (County Bridge in CUF and South Fairmont)

This project consists of performing a "hands on" inspection of every fracture critical member on the Western Hills Viaduct as well as inspecting every fatigue-prone member within arm's length and will be carried out by a directed consultant. Work is expected to begin in April of 2009 and

be complete within 6 weeks. The estimated cost for this work is \$70,000 and is being financed using County MRF bridge funds.

Western Hills Viaduct East Stairway Reconstruction (County Bridge in CUF and South Fairmont)

This project consists of removing and replacing portions of the east stairway from Spring Grove Avenue to the upper deck. Work is scheduled to take place in the fall of 2009 and will be financed using County MRF bridge funds. The estimated contract cost for this work is \$40,000.

Marburg Avenue Bridge over Norfolk Southern Railroad – Inspection and Interim Repair Contract (County Bridge in Hyde Park)

This project consists of performing a hands-on inspection of the beam ends and pier seats by a directed consultant to determine the extent of repairs needed at the expansion joints located over both piers. It is expected that the expansion joints will require replacement and that concrete repairs will be required at the beam ends and the pier seats. The asphalt wearing surface will also be removed and replaced. The consultant will begin work in the spring of 2009 and complete their work within 30 days. The repair contract is expected to be bid in the Fall of 2009 and will be financed using County MRF funds.

Clifton Avenue Bridge over the Mill Creek (County Bridge in Spring Grove Village and Northside)

This project consists of removing and replacing the existing superstructure as well as widening the bridge with corresponding improvements to the substructure. Work on this project is expected to begin in the spring of 2009 and will be financed using County MRF bridge funds and State OPWC funds at a 30/70 funding split ratio. The estimated cost for this work is \$1,900,000.